

## ABSTRACT

A nano structure having pore array structures in which a plurality of periodic arrays are formed adjacent to one another and a method of manufacturing the nano structure are provided. A nano structure having periodic array structures of pores formed in an anodized oxide film with a plurality of types of the periodic array structures arranged adjacent to one another is provided. Furthermore, a method of manufacturing a nano structure in which a plurality of periodic array structures formed in an anodized oxide film having different periods are arranged adjacent to one another, including (1) a step of forming pore starting points made up of a plurality of types of periodic arrays on the surface of a substrate comprised of aluminum as a principal component and (2) a step of anodizing the substrate simultaneously at the same anodization voltage is provided.